

Application Serial No. 09/800,743

LISTING OF THE CLAIMS

Claims 1- 10 (cancelled).

11. (Withdrawn) An Internet telephone switch, comprising:

means for switching data from a first channel on a first switched virtual circuit/switched virtual path to a second channel on a second switched virtual circuit/switched virtual path; and

means for stripping headers from IP traffic using out-of-band signaling.

12. (Withdrawn) The Internet telephone switch of claim 11, further comprising means for converting data among a TCP/UDP/IP network, an AAL2 ATM network, and an AAL5 ATM network.

13. (Cancelled)

14. (Cancelled)

15. (Withdrawn) An multiprotocol convergence switch comprising:

at least one protocol stack;

at least one data transfer layer; and

at least one multiprotocol convergence switch controller for enabling a first telephone to connect to at least one other telephone using a single virtual circuit and for managing communications with an external call agent.

16. (Withdrawn) The multiprotocol convergence switch of claim 15, wherein the protocol stack comprises:

a UDP/IP stack; and

an ATM stack.

17. (Withdrawn) The multiprotocol convergence switch of claim 16 wherein the ATM stack comprises at least one layer selected from the group consisting of an AAL2 layer and an AAL5 layer.

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18. (Withdrawn) The multiprotocol convergence switch of claim 17 wherein data received from an AAL5 stack user is passed to the AAL5 data transfer layer and data received from an AAL2 stack user is passed to the AAL2 data transfer layer.

19. (Withdrawn) The multiprotocol convergence switch of claim 15 wherein the data transfer layer includes at least one data transfer element.

20. (Withdrawn) The multiprotocol convergence switch of claim 15 wherein the switch controller comprises:

- a call agent communication element;
- a UDP signaling element;
- an ATM signaling element; and

a routing table.

21. (Withdrawn) A packet switched Internet telephone network comprising:

- a first multiprotocol convergence switch;
- at least a second multiprotocol convergence switch;
- at least one external call agent associated with each multiprotocol convergence switch for controlling the respective multiprotocol convergence switch; and
- at least a first ATM virtual circuit connecting the first and second multiprotocol convergence switches.

22. (Cancelled)

23. (Withdrawn) A method of header stripping comprising:

- receiving, on a first input UDP port, a packet comprising a header and data;
- using a first multiprotocol convergence switch to find, in a first routing table, a first output UDP port associated with the first input UDP port;
- using the first multiprotocol convergence switch to strip the header from the packet;
- storing the header within a call setup message;

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sending the call setup message to a second multiprotocol convergence switch;
saving a header in a second routing table associated with said second multiprotocol convergence switch, using the information in said call setup message;
using the first multiprotocol convergence switch to write the data to the first output UDP port;
receiving the data at the second multiprotocol convergence switch on a second input UDP port associated with the first output UDP port;
using the second multiprotocol convergence switch to retrieve the header from the second routing table;
using the second multiprotocol convergence switch to find, in the second routing table, a second output UDP port;
adding the header from the second routing table to the data to reconstitute the packet; and
writing the packet to the second output UDP port.

24. (Withdrawn) The method of claim 23 further comprising:

using the second multiprotocol convergence switch to increment a packet ID and to recalculate a checksum associated with the header to generate a new header; and
placing the new header in the second routing table.

25. (Withdrawn) A method for header stripping in a switched packet network, comprising:

establishing a first connection for transmitting a data flow comprising at least one data packet, the data packet including data, a header, and an ID;
terminating the data flow into the packet-switched network at an ingress point;
determining a destination of the data packet;
determining a route through the network from the ingress point to the data packet destination;
establishing a second connection comprising an AAL2 trunk from the ingress point to an egress point;
establishing a third connection from the egress point to a data packet destination;
stripping the header from the data packet;
passing the header to the egress point;
placing the header in a routing table such that it is associated with the selected route;
sending the data packet to the egress point;
retrieving the header from the routing table in accordance with the route by which the egress point receives the data packet;

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reattaching the header to the data packet; and
transmitting the data packet to the destination.

26. (new) A method for providing a quality of service-based packets which telephone network to effect Internet telephony, comprising the steps of:
providing a multi-protocol convergence switch (MPCS) for an enabling a telephone to connect to every other telephone within said telephone network through the Internet using a single virtual circuit (VC);
said packets which telephone network comprising multiple MPCS's said network packets which to telephone network be informed by comprising by connecting at least two MPCS's by said VC's;
connecting each telephone to a single MPCS;
when a telephone call is made, sending said call to a telephone associated MPCS;
said MPCS determining where said call should be routed based on an intended destination;
sending said call through said packets which telephone network to a destination MPCS;
said destination MPCS in turn sending said call out to a destination telephone through a VC associated with said destination telephone;
said MPCS straddling an edge network and a core network, said core network comprising a network that carries traffic from one edge network to another edge network said edge network comprising an IP network, said MPCS supporting multi-protocol label switching (MPLS) to reserve resources through said IP network for specific traffic.

27. (new) The method of claim 26 said MPCS further performing the steps of:
converting data from said IP network to an AAL2 network and vice versa;
converting from an AAL5 network to AAL2 network and vice versa;
switching data from AAL2 channel on a work VC/virtual path (VP) to a different AAL2 channel on a different VC/VP;
performing interstripping on IP traffic; and
enabling preprovisioning on VC/VPs, wherein VC/VPs are set up in advance and are selected by a call agent when needed for a call.